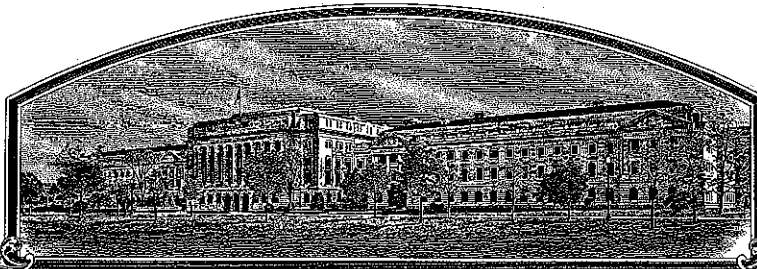


No.

200000018



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Rijk Zwaan Zaadteelt en Zaadhandel B.V.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PROPAGATING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED IN THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'Fortunas'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twelfth day of December, in the year two thousand and five.

Attest:

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

Secretary of Agriculture



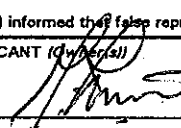
U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Rijk Zwaan Zaadteelt en Zaadhandel B.V.		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME FORTUNAS
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) Burgemeester Crezeelaan 40 2678 KX DE LIER, The Netherlands		5. TELEPHONE (include area code) + 31 174 532300	<b>FOR OFFICIAL USE ONLY</b> PVP NUMBER 200000018 FILING DATE Oct 26, 1999 FILING AND EXAMINATION FEE \$ 2450.00 RECEIPT DATE Oct 26, 1999 CERTIFICATION FEE \$ 682.00 RECEIPT DATE 10-13-05
7. GENUS AND SPECIES NAME Lettuce (Lactuca sativa L.)		6. FAX (include area code) + 31 174 513730	
8. FAMILY NAME (Botanical) Compositae		9. CROP KIND NAME (Common name) Lettuce	
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name) Rijk Zwaan Zaadteelt en Zaadhandel B.V. Corporation			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Corporation		12. DATE OF INCORPORATION The Netherlands 18.08.1953	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS			14. TELEPHONE (include area code)
			15. FAX (include area code)
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) <ul style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety</li> <li>b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness</li> <li>c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety</li> <li>d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety</li> <li>e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership</li> <li>f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository)</li> <li>g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)</li> </ul>			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act?) <input type="checkbox"/> YES (If "yes," answer items 18 and 19 below) <input checked="" type="checkbox"/> NO (If "no," go to item 20)			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES (If "yes," give names of countries and dates) <input type="checkbox"/> NO Fortunas has been sold for the first time in Spain in December 1997. The variety has not yet been sold in the U.S.			
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.  The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.  Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s)) 		SIGNATURE OF APPLICANT (Owner(s))	
NAME (Please print or type) M. Zwaan		NAME (Please print or type)	
CAPACITY OR TITLE Managing Director		CAPACITY OR TITLE	
DATE 09-22-1999		DATE	

## INSTRUCTIONS

**GENERAL:** To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A, B, C, E; (3) at least 2,500 viable untreated seeds, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in a public repository prior to issuance of a certificate; (4) check drawn on a U.S. bank for \$2,450 (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (*See Section 97.175 of the Regulations and Rules of Practice.*) Partial applications will be held in the PVPO for not more than 30 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the Certificate.

Plant Variety Protection Office  
Telephone: (301) 504-5518

### ITEM

- 16a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.
- 16b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
- (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences;
- (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 16c. Exhibit C forms are available from the PVPO for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 16d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 16e. Section 52(4) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employee of the breeder, the owner through purchase or inheritance, etc.
17. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant may NOT reverse this affirmative decision after the variety has been sold and so labelled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (*See P.L. 103-349 for additional information.*)
20. See Sections 41, 42, and 43 of the Act and Section 97.175 of the regulations for eligibility requirements.

**NOTES:** It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment is specified in Section 97.175 of the regulations. (*See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of Regulations and Rules of Practice.*)

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705.  
Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Washington, DC 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB No. 0681-0065), Washington, DC 20503.

EXHIBIT A: *Genealogy/Details of stages of selection and multiplication:*

PIVT 793202	x	BC 2 ('Calona' x 'Malika')	Year of cross 1986
		F1	
		F2	
	x	BC2 ('Saladin RZ' x 'Malika')	1987
		F1 x 'Saladin RZ'	1988
'Saladin RZ'	x	F1	1989
		F2	
		F3	
	x	'Saladin-Quick RZ'	1991
		F1	
		F2	
		F3	
		F4	
		F5	

In 1996 seeds of an F5 line from this last cross were used to produce commercial seeds of Fortunas (45-05 RZ) and for samples for EU variety listing and Community Plant Variety Protection.

Field evaluation of lines include the following features:

- Homogeneity
- Plant size
- Heading
- Head size
- Head density
- Head weight
- Tipburn
- Bolting

Tests in the laboratory include resistance to *Nasonovia ribisnigri* and Downy Mildew.

*Genetic material used:*

- PIVT 793202 is a line released by the former Institute of Horticultural Plant Breeding (IVT, now part of CPRO-DLO), Wageningen, The Netherlands. This line resulted from interspecific crosses between *Lactuca sativa* (cultivated lettuce) and the wild species *Lactuca virosa* CGN 4683 (=PIVT 280), using *Lactuca serriola* as a bridge species. Plants derived from this interspecific crossing program, with restored fertility and comprising in their genome a *Lactuca virosa* chromosome fragment with the resistance to *Nasonovia ribisnigri* were released to seed companies in 1981.

The obtention of PIVT 793202 is described in:

Eenink, A. H., Groenwold, R. & Dieleman, F. L., 1982. Resistance of lettuce (*Lactuca*) to the leaf aphid *Nasonovia ribisnigri*. 1. Transfer of resistance from *L. virosa* to *L. sativa* by interspecific crosses and selection of resistant breeding lines. *Euphytica* 31, 291-300.

- 'Callona' is a commercial crisphead cultivar of Novartis Seeds
- 'Malika' is a commercial crisphead cultivar of Novartis Seeds
- 'Saladin RZ' and 'Saladin Quick RZ' are Rijk Zwaan selections within the 'Saladin' (syn. 'Salinas') cultivar.



EXHIBIT A - continued

*The type and frequency of variants during reproduction and multiplication and how these variants may be identified:*

The frequency of wild types is 0.4 %. These variants may be identified as big plant that do not make a head.



## EXHIBIT B: Statement of Distinctness

*Identify the varieties and state all differences objectively:*

Fortunas is a crisp lettuce, blackseeded, without anthocyanin for outdoor culture with resistance to Downy Mildew races NL 1, 2, 5, 6, 7 and 14 and resistance to *Nasonovia ribisnigri*. It resembles Vetonas most, but is distinct because of its larger plant size and the somewhat later harvest maturity.

*Difference from parent varieties:*

Denomination of parent variety	Characteristic in which the similar variety is different	State of expression of similar variety	State of expression of candidate variety
Saladin*	Spread of frame leaves	55 cm.	58 cm.
Saladin*	Head: diameter	15 cm.	16 cm.
Saladin*	Head: weight	721 grs.	820 grs.
Saladin*	Core: height from base of head to apex	42 mm.	55 mm.
Saladin*	Bolting	122 days	116 days
Saladin*	Bolting: height of mature seed stalk	119 cm.	136 cm.
Saladin*	<i>Nasonovia ribisnigri</i>	susceptible	resistant
Calona	<i>Nasonovia ribisnigri</i>	susceptible	resistant
Malika	<i>Nasonovia ribisnigri</i>	susceptible	resistant
Calona	Lettuce Mosaic Virus	tolerant	susceptible
Malika	Lettuce Mosaic Virus	tolerant	susceptible

\* Saladin is a synonym for Salinas

*Difference from other lettuce varieties from the database:*

Denomination of parent variety	Characteristic in which the similar variety is different	State of expression of similar variety	State of expression of candidate variety
Vanguard	<i>Nasonovia ribisnigri</i>	susceptible	resistant
Vetonas	Head: weight	965 grs.	820 grs.
Vetonas	Bolting	123 days	116 days

## Exhibit A

The number of generations over which uniformity and stability has been observed is: 2.

## Exhibit B

Fortunas contains the dominant Nr-gene, which provides complete resistance to the currant-lettuce aphid *Nasonovia ribis-nigri* (Eenink and Dielman, 1983. Euphytica 32: 691-695). Further details about this monogenic resistance gene are presented by Eenink et al., (Euphytica 31, 1982.

301-304) and Jansen (US patent no. 5,977,443. 1999). This gene is absent in parent varieties Saladin, Calona, and Malika and in comparison variety Vanguard.

Parent varieties Calona and Malika contain the recessive mol.1-gene, which provides resistance to the LMV-0-strain (Pink et al., 1992. Euphytica 63: 169-174). This gene was originally described by Von der Pahlen and Crnko (Rev. Invest. Agropecuarias 11: 25-31). It was recently cloned by Nicaise et al. (Plant Physiol 132: 1272-1282). This gene is absent in the candidate variety Fortunas.

## Trial 1

location: Hendrik-Ido-Ambacht, the Netherlands

sowing: 17-03-1998

planting: 27-04-1998

harvest: 22-06-1998

variety:	Fortunas(n=10)	Saladin(n=10)	Vetonas(n=10)
days to bolting:	152.7(sd=1.2)	159.0(sd=0.7)	159.6(sd=0.8)
head weight:	704(sd=68)	604(sd=55)	847(sd=60)
head diameter:	15.5(sd=1.1)	14.5(sd=1.4)	15.0(sd=1.1)

## Trial 2

location: Roelofarendsveen, the Netherlands

sowing: 16-02-1998

planting: 30-03-1998

harvest: 26-05-1998

variety:	Fortunas (n=10)	Saladin(n=10)	Vetonas(n=10)
days to bolting:	158.0(sd=0.9)	163.6(sd=1.2)	165.3(sd=0.9)
head weight:	820(sd=38)	721(sd=45)	965(sd=47)
head diameter:	16.1(sd=1.0)	14.9(sd=1.6)	16.0(sd=1.2)

F-tests based on analysis of variance across both locations show that Fortunas is significantly different from Vetonas for days to bolting ( $F=524$ ;  $p<0.001$ ), and head weight ( $F=70$ ;  $p<0.001$ ). F-tests based on analysis of variance across both locations show that Fortunas is significantly different from Saladin for days to bolting ( $F=349$ ;  $p<0.001$ ), head weight ( $F=36$ ;  $p<0.001$ ), and head diameter ( $F=8.9$   $p=0.005$ ).

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK AND SEED DIVISION  
**OBJECTIVE DESCRIPTION OF VARIETY**  
LETTUCE *Lactuca sativa*

EXHIBIT C

NAME OF APPLICANT (S) <b>Rijk Zwaan Zaadteelt en Zaadhandel B.V.</b> ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <b>Burgemeester Crezeelaan 40</b> <b>2678 KX DE LIER</b> <b>The Netherlands</b>	FOR OFFICIAL USE ONLY PVPO NUMBER <b>2000000018</b>
	VARIETY NAME <b>FORTUNAS</b>
	EXPERIMENTAL DESIGNATION

Place numbers in the boxes for the characters which best describe this variety. Measured data should be the mean of an appropriate number (at least 10) of well aced plants. Royal Horticultural Society or any recognized color standard may be used to determine plant colors.

Location of the test area is: <b>The Netherlands</b>	Color System Used:
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PLANT TYPE: (See list of suggested check varieties page 4.)

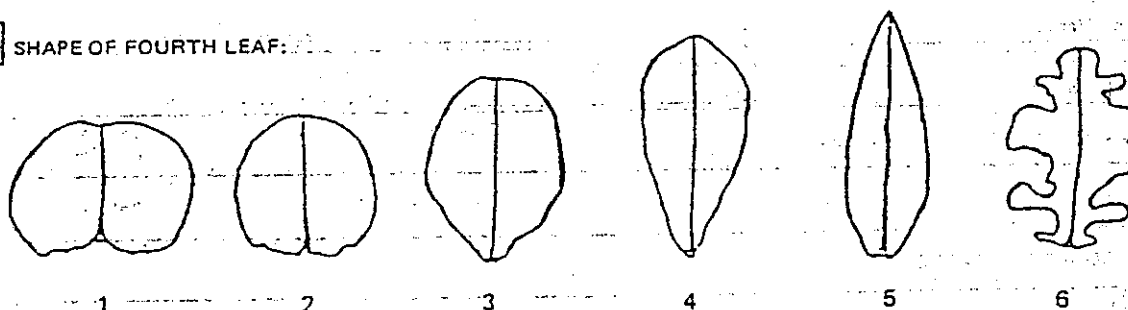
<input type="checkbox"/> 0 <input type="checkbox"/> 6 01=Cutting/Leaf 02=Butterhead 03=Bibb 04=Cos or Romaine	05=Great Lakes Group 06=Vanguard Group 07=Imperial Group 08=Eastern (Ithaca) Group	09=Stem 10=Latin 11=OTHER
---	---	---------------------------------

SEED: <input type="checkbox"/> 2 COLOR 1=White (Silver Gray) 2=Black (Gray Brown) 3=Brown (Amber)	<input type="checkbox"/> LIGHT DORMANCY 1=Light Required 2=Light Not Required	<input type="checkbox"/> HEAT DORMANCY 1=Susceptible 2=Not Susceptible
---	--	---

COTYLEDON TO FOURTH LEAF STAGE: NOTE: Provide a color photograph or photocopy of the fourth leaf from 20 day old seedling grown under optimal conditions.

<input type="checkbox"/> 2 SHAPE OF COTYLEDONS:	1=Broad 2=Intermediate 3=Spatulate
--	--

☐ 4 SHAPE OF FOURTH LEAF:



☐ 2 ☐ 3 LENGTH/WIDTH INDEX OF FOURTH LEAF: LW x 10

<input type="checkbox"/> 3 APICAL MARGIN:	1=Entire 2=Creanate/Gnawed 3=Finely Dentate	4=Moderately Dentate 5=Coarsely Dentate 6=Incised	7=Lobed 8=OTHER (specify)
<input type="checkbox"/> 5 BASAL MARGIN:			

<input type="checkbox"/> 1 UNDULATION:	1=Flat 2=Slight 3=Medium 4=Marked
---	--

<input type="checkbox"/> 7 GREEN COLOR:	1=Yellow Green 2=Light Green 3=Medium Green 4=Dark Green 5=Blue Green 6=Silver Green 7=Gray Green
--	---

ANTHOCYANIN:

<input type="checkbox"/> 1 DISTRIBUTION:	1=Absent 2=Margin Only 3=Spotted 4=Throughout 5=OTHER (specify)
---	---

<input type="checkbox"/> - CONCENTRATION:	1=Light 2=Moderate 3=Intense
--	------------------------------------

<input type="checkbox"/> 2 ROLLING:	1=Absent 2=Present
--	-----------------------

<input type="checkbox"/> 1 CUPPING:	1=Uncupped 2=Slight 3=Markedly
--	--------------------------------------

<input type="checkbox"/> 3 REFLEXING:	1=None 2=Apical Margin 3=Lateral Margins
--	--



## 4. MATURE LEAVES (observe harvest-mature outer leaves):

NOTE: Provide color photo of harvest-mature leaves which accurately shows color and margin characteristics.

## MARGIN:

2	INCISION DEPTH: (deepest penetration of the margin)	1=Absent/Shallow (Dark Green Boston)	2=Moderate (Vanguard)	3=Deep (Great Lakes 659)
4	INDENTATION: (finest divisions of the margin)	1=Entire (Dark Green Boston) 2=Shallowly Dentate (Great Lakes 65)	3=Deeply Dentate (Great Lakes 659) 4=Crenate (Vanguard)	5=OTHER (specify)
2	UNDULATION OF THE APICAL MARGIN:	1=Absent/Slight (Dark Green Boston)	2=Moderate (Vanguard)	3=Strong (Great Lakes 659)
3	GREEN COLOR:	1=Very Light Green (Bibb) 2=Light Green (Minetto)	3=Medium Green (Great Lakes) 4=Dark Green (Vanguard)	5=Very Dark Green 6=OTHER
ANTHOCYANIN (grown at or below 10 C):				
1	DISTRIBUTION:	1=Absent 2=Margin Only (Big Boston)	3=Spotted (Calif. Cream Butter) 4=Throughout (Prize Head)	5=OTHER (specify)
-	CONCENTRATION:	1=Light (Iceberg)	2=Moderate (Prize Head)	3=Intense (Ruby)
3	SIZE:	1=Small	2=Medium	3=Large
2	GLOSSINESS:	1=Dull (Vanguard)	2=Moderate (Salinas)	3=Glossy (Great Lakes)
2	BLISTERING:	1=Absent/Slight (Salinas)	2=Moderate (Vanguard)	3=Strong (Prize Head)
3	LEAF THICKNESS:	1=Thin	2=Intermediate	3=Thick
1	TRICHOMES:	1=Absent (smooth)	2=Present (spiny)	

## 5. PLANT (at market stage. Choose a comparison variety appropriate for this type.):

5	8	SPREAD OF FRAME LEAVES:	
cm This Variety		5	5 cm Saladin (specify comparison variety)
1	6	HEAD DIAMETER (market trimmed with single cap leaf):	
cm This Variety		1	5 cm Saladin (specify comparison variety)
2	HEAD SHAPE:		
1=Flattened 2=Slightly Flattened		3=Spherical 4=Elongate	5=Non-Heading 6=OTHER
3	HEAD SIZE CLASS:		
1=Small		2=Medium	3=Large
HEAD COUNT PER CARTON			
8	2	0	HEAD WEIGHT:
g This Variety		7	2 1 g Saladin (specify comparison variety)
4	HEAD FIRMNESS:		
1=Loose 2=Moderate		3=Firm 4=Very Firm	

## 6. BUTT (bottom of market-trimmed head):

2	SHAPE:	1=Slightly Concave	2=Flat	3=Rounded
2	MIDRIB:	1=Flattened (Salinas)	2=Moderately Raised	3=Prominently Raised (Great Lakes 659)

## CORE (stem of market-trimmed head):

3	8	mm Diameter at base of head
4	2	Ratio of head diameter/core diameter
5	5	Core height from base of head to apex:
mm This Variety		4 2 mm Saladin (specify comparison variety)

## BOLTING (Give First Water Date 03-30-1998):

NOTE: First Water Date is the date seed first receives adequate moisture to germinate. This can and often does equal the planting date.

1	5	8	Number of days from First Water Date to seed stalk emergence (summer conditions):
This Variety		164	1 2 2 Saladin (specify comparison variety)
1	BOLTING CLASS:		
1=Very Slow 2=Slow		3=Medium 4=Rapid	5=Very Rapid
1	3	6	Height of mature seed stalk:
cm This Variety		1 1 9 cm Saladin (specify comparison variety)	

Spread of Bolter Plant (at widest point):  
  cm This Variety   cm Saladin (specify comparison variety)

BOLTER LEAVES: 1=Straight 2=Curved  
 MARGIN: 1=Entire 2=Dentate  
 COLOR: 1=Light Green 2=Medium Green 3=Dark Green

BOLTER HABIT:  
 TERMINAL INFLORESCENCE: 1=Absent 2=Present  
 LATERAL SHOOTS: (above head) 1=Absent 2=Present  
 BASAL SIDE SHOOTS: 1=Absent 2=Present

9. MATURITY (earliness of harvest-mature head formation):

NOTE: Complete this section for at least one season.

SEASON	Applic. 1/ #of days	Check 1/ #of days	CHECK VARIETY 2/
Spring	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	
Summer	<input type="text"/> 5 <input type="text"/> 7	<input type="text"/> 5 <input type="text"/> 7	Saladin
Fall	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	
Winter	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	

Give planting date(s), and location(s):

Spring \_\_\_\_\_

Summer 03-30-1998, Roelofarendsveen, The Netherlands

Fall \_\_\_\_\_

Winter \_\_\_\_\_

1/ First water date to harvest.

2/ Fill in check variety name on the appropriate line.

10. ADAPTATION:

PRIMARY REGIONS OF ADAPTION (tested and proven adapted):

(0=Not tested

1=Not Adapted

2=Adapted)

☐ Southwest (Calif., Ariz. desert)

☐ West Coast

☐ Northeast

☐ Northcentral

☐ Southeast

☐ OTHER \_\_\_\_\_

SEASON:

☐ Spring (area \_\_\_\_\_)

☐ Fall (area \_\_\_\_\_)

☐ Summer (area \_\_\_\_\_)

☐ Winter (area \_\_\_\_\_)

☐ GREENHOUSE: 0=Not tested

1=Not Adapted

2=Adapted

☐ SOIL TYPE: 1=Mineral

2=Organic

3=Both

1. DISEASES AND STRESS REACTIONS (0=Not tested; 1=Susceptible; 2=Intermediate; 3=Resistant; 4=Highly resistant; 5=Tolerant):

VIRUS

- ☒ 2 Big Vein  
☒ 1 Lettuce Mosaic  
☒ 1 Cucumber Mosaic  
☐ 0 Broad Bean Wilt  
☐ 0 Turnip Mosaic  
☒ 2 Beet Western Yellows  
☐ 0 Lett. Infectious Yellows  
☐ Other Virus \_\_\_\_\_

FUNGAL/BACTERIAL

- ☒ 1 Corky Root Rot (Pythium Root Rot)  
☒ 4 Downy Mildew (Races CAI, NL 1, 2, 4, 5, 6, 7, 14, BI-19)  
☐ 0 Powdery Mildew  
☐ 0 Sclerotinia Rot  
☐ 0 Bacterial Soft Rot (Pseudomonas spp. & others)  
☐ 0 Botrytis (Gray Mold)  
☐ OTHER \_\_\_\_\_

INSECTS

- ☐ 0 Cabbage Loopers  
☒ 1 Root Aphids  
☐ 0 Green Peach Aphid  
☒ 4 Other Insect Nasonovia ribisnigri

PHYSIOLOGICAL/STRESS

- ☒ 3 Tipburn  
☐ 0 Heat  
☐ 0 Drought  
☒ 2 Cold  
☒ 3 Salt  
☒ 3 Brown Rib (Rib Discoloration, Rib Blight)  
☐ OTHER \_\_\_\_\_

POST HARVEST

- ☐ 0 Pink Rib  
☐ 0 Russet Spotting  
☐ 0 Rusty Brown Discoloration  
☐ 0 Internal Rib Necrosis (Blackheart, Gray Rib, Gray Streak)  
☐ 0 Brown Stain

BIOCHEMICAL OR ELECTROPHORETIC MARKERS:

COMMENTS:

SUGGESTED CHECK VARIETIES

TYPE	CHECK VARIETY
1) CUTTING/LEAF	SALAD BOWL
2) BUTTERHEAD	DARK GREEN BOSTON
3) BIBB	BIBB
4) COS, OR ROMAINE	PARRIS ISLAND
5) GREAT LAKES GROUP	GREAT LAKES 659-700
6) VANGUARD GROUP	VANGUARD
7) IMPERIAL GROUP	VIVA
8) EASTERN GROUP	ITHACA
9) STEM	CELTUCE
10) LATIN	MATCHLESS

Lettuce, 'Fortunas'



EXHIBIT D

*Additional Description of the Variety*

Fortunas is a crisp lettuce in the Vanguard group, resistant to Downy Mildew NL races NL 1, 2, 5, 6, 7 and 14 and Ca I, and Nasonovia ribisnigri.

Fortunas is especially suited for heavy or salt soils, where other varieties stay too small.

Fortunas is a variety of the Salinas type and can be used in plantings from Spring until Fall.

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

**EXHIBIT E**  
**STATEMENT OF THE BASIS OF OWNERSHIP**

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Rijk Zwaan Zaadteelt en Zaadhandel B.V.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME FORTUNAS
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) Burgemeester Crezeelaan 40 2678 KX DE LIER, The Netherlands	5. TELEPHONE (include area code) + 31 174 532300	6. FAX (include area code) + 31 174 513730
7. PVPO NUMBER 200000018		

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?

If no, give name of country Netherlands

☐ YES ☒ NO

10. Is the applicant the original breeder? If no, please answer the following:

☒ YES ☐ NO

a. If original rights to variety were owned by individual(s):

Is (are) the original breeder(s) a U.S. national(s)? If no, give name of country \_\_\_\_\_

☐ YES ☐ NO

b. If original rights to variety were owned by a company:

Is the original breeder(s) U.S. based company? If no, give name of country \_\_\_\_\_

11. Additional explanation on ownership (If needed, use reverse for extra space):

**PLEASE NOTE:**

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original breeder, both the original breeder and the applicant must meet one of the above criteria.

The original breeder may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter.

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